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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/536,056 | 03/27/2000 | Teppei Yokota | 450100-02414 | 4614 |

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| EXAMINER | |
|---|---|
| TRAN, TONGOC | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2134 | |

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/536,056 | YOKOTA ET AL. | |
| | Examiner | Art Unit | |
| | Tongoc Tran | 2134 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 March 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

1. This office action is in response to applicants' application serial no. 09536,056 filed on 3/27/2000.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 11 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the number of "8" and "16" is referencing to. For the purpose of prosecuting the application, examiner assumes applicants intend to refers "8" and "16" to be "8 kilobytes" and "16 kilobytes"

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 5-9, 12-16, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikakura (U.S. Patent No. 5,594,598) in view of Owashi et al. (U.S. Patent No. 5,903,704 hereinafter Owashi).

In respect to claim 1, Shikakura discloses a non-volatile recording medium for recording a digital video signal that has been compressed at a compression rate selectable in a predetermined range and block-segmented in a predetermined data length, wherein the predetermined data length of which the digital video data is block-segmented is decided in consideration of the maximum recordable time (see Shikakura, col. 2, lines 24-45, col. 3, lines 1-29).

Shikakura does not disclose an encrypted digital audio signal but Owashi discloses an encrypted digital audio signal (see col. 9, lines 24-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Shikakura to record a digital video signal to be compressed with the teaching of Owashi to encrypt compressed audio signal so that copyright of the signal can be protected (Owashi, col. 1, lines 21-27).

In respect to claim 2, Shikakura and Owashi disclose the non-volatile record medium as set forth in claim 1. Shikakura and Owashi do not explicitly disclose wherein the recordable capacity of the non-volatile record medium is 64 Mbytes. However, non-volatile memory such as magnetic or optical disk having memory capacity of 64 Mbytes is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to record digital audio or video signal in 64 megabytes because audio or video signal requires more memory capacity.

In respect to claim 5, Shikakura and Owashi disclose the non-volatile record medium as set forth in claim 1. Shikakura and Owashi do not disclose wherein the maximum recordable time is a time period of which a data file of around 60 minutes or around 74 minutes is recorded. However, maximum recordable time of a recording medium set between 60 and 74 minutes is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Shikakura and Owashi's maximum recording capability to be 60 minutes or 74 minutes in order to set the maximum recordable time between general accepted industry standards.

In respect to claims 6 and 7, Shikakura and Owashi disclose the non-volatile recording medium as set forth in claim 1. Shikakura and Owashi do not disclose wherein the non-volatile record medium is a flash memory. However, recording digital data in a flash memory is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement flash memory with the teaching of Shikakura and Owashi's magnetic tape teaching for the benefit of its size and durability.

In respect to claim 8, the claim limitation is a method claim which is substantially similar to recording medium of claim 1. Therefore, claim 8 is rejected based on the similar rationale.

In respect to claims 9, 12-14, the claim limitations are method claims which are substantially similar to recording medium claims 2, 5-7. Therefore claims 9, 12-14 are rejected based on the similar rationale.

In respect to claim 15, the claim limitations is an apparatus claim which is substantially similar to recording medium claim 1. Therefore, claim 15 is rejected based on the similar rationale.

In respect to claims 16, 19-21, the claim limitations are apparatus claims which are substantially similar to recording medium claims 2, 5-7. Therefore claims 16, 19-21 are rejected based on the similar rationale.

6. Claims 3, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikakura (U.S. Patent No. 5,594,598) and Owashi (U.S. 5,903,704) as applied to claim 1 above, and further in view of Takahashi et al. (U.S. Patent No. 6,453,120 hereinafter Takahashi).

In respect to claim 3, Shikakura and Owashi disclose the non-volatile record medium as set forth in claim 1. Shikakura and Owashi teach compressing at various compression rate but do not explicitly disclose wherein the predetermined range of the compression ratio is from 1/8 to 1/43. However, Takahashi discloses compression rate can be selected from among, for example, 1/4, 1/8, 1/16 and 1/32 (see Takashashi, col. 10, lines 40-54). However, it would have been obvious to one of ordinary skill at the time the invention was made to modify the teaching of compressing audio and video signal at various rate taught by Shikakura and Owashi and selecting compression ratio of 1/4 to 1/32 taught by Takashashi to include the compression ratio from 1/8 to 1/43 as a matter of design choice to choose between speed and quality.

In respect to claims 10 and 17, the claim limitations are method and apparatus claim which are substantially similar to claims recording medium claim 3. Therefore, claim 10 and 17 are rejected based on the similar rationale.

7. Claims 4, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikakura (U.S. Patent No. 5,594,598) and Owashi (U.S. 5,903,704) as applied to claim 1 above, and further in view of Shimoi et al. (U.S. Patent No. 5,652,857 hereinafter Shimoi).

In respect to claim 4, Shikakura and Owashi disclose the non-volatile record medium as set forth in claim 1. Shikakura and Owashi do not explicitly discloses wherein the data length of which the digital audio data is encoded is a multiple of 8 kilobytes or 16 kilobytes. However, Shimoi discloses multiple data blocks of multimedia with 16 kilobytes (see Shimoi, col. 1, lines 14-15 and col. 11, lines 1-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shimoi with data length of multiple of 16 kilobytes with the teaching of Shikakura and Owashi's compressed data length for the benefit of managing the variable length compression data in a form of a fixed length compression group to prevent fragmentation to occur on the disk medium (see Shimoi, col. 1, line 45-col. 2, line 1).

In respect to claims 11 and 18, the claim limitations are method and apparatus claims which are substantially similar to claims recording medium claim 4. Therefore, claim 11 and 18 are rejected based on the similar rationale.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Nagai et al. Disclose a method and apparatus for editing an audio vidual signal.

-Ueda et al. Disclose an apparatus and method for preventing unauthorized use of information recorded on an information recording medium.

-Chou discloses a method for preventing copying of digital video disks.

-Tojo et al. Disclose a digital image recording and/or reproducing apparatus using a plurality of compression methods.

-Shimoyoshi et al. Disclose an encoding method and apparatus and recording medium.

-Kawakami et al. disclose a file system and file management method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9600.

Examiner Tongoc Tran
Art Unit: 2134

TT
January 7, 2004

MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137